

IN THE CLAIMS:

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Please Cancel claims 1-26.

Please add the following new claims:

-- 27. An isolated nucleic acid comprising the sequence depicted in Figure 3, SEQ ID NO:1, which is flanked by a heterologous sequence.

C₁ 28. The nucleic acid of claim 27, wherein said nucleic acid is DNA.

29. The nucleic acid of claim 27, wherein said nucleic acid is RNA.

30. A recombinant DNA vector comprising the nucleic acid of claim 27.

31. A recombinant DNA vector comprising the nucleic acid of claim 27 operably linked to a transcription regulatory element.

32. A cell comprising a DNA vector of claim 31.

33. The cell of claim 32 which is selected from the group consisting of bacterial, fungal, plant, insect, and mammalian cells.

34. A method for producing a polypeptide, which method comprises incubating the cell of claim 32 under conditions that permit expression of a polypeptide encoded by the nucleic acid.

35. The method of claim 34, which further comprises:

(a) harvesting said incubated cells to produce a cell fraction and a medium fraction; and

(b) recovering the polypeptide from the cell fraction, the medium fraction, or both.

36. An isolated nucleic acid having a sequence encoding an amino acid sequence depicted in Figure 4 SEQ ID NO:2, which is flanked by a heterologous sequence.

37. The nucleic acid of claim 36, wherein said nucleic acid is DNA.

38. The nucleic acid of claim 36, wherein said nucleic acid is RNA.

39. A recombinant DNA vector comprising the nucleic acid of claim 36.

40. A recombinant DNA vector comprising the nucleic acid of claim 36 operably linked to a transcription regulatory element.

41. A cell comprising a DNA vector of claim 40.

42. The cell of claim 41 which is selected from the group consisting of bacterial, fungal, plant, insect, and mammalian cells.

43. A method for producing a polypeptide, which method comprises incubating the cell of claim 41 under conditions that permit expression a polypeptide encoded by the nucleic acid.

44. The method of claim 43, which further comprises:

(a) harvesting said incubated cells to produce a cell fraction and a medium fraction; and

(b) recovering the polypeptide from the cell fraction, the medium fraction, or both.

45. An isolated nucleic acid having a sequence encoding an amino acid sequence consisting of amino acids 1-45 of Figure 4, SEQ ID NO:2.

46. The nucleic acid of claim 45, wherein the nucleic acid comprises a nucleotide sequence consisting of nucleotides 94-229 of Figure 3, SEQ ID NO:1.

47. A recombinant DNA vector comprising the sequence as defined in claim 45.

48. A recombinant DNA vector comprising the nucleic acid of claim 45 operably linked to a transcription regulatory element.

49. A cell comprising a DNA vector of claim 48.

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50. A method for identifying hER β - interactive compounds, which method comprises:

(a) contacting the cell comprising a DNA vector of claim 32 with a labelled ligand in the presence of test compounds to form test reactions, and in the absence of test compounds to form control reactions;

(b) incubating said test and control reactions under appropriate conditions to achieve equilibrium binding of the labelled ligand to hER β ;

(c) determining the level of binding of the labelled ligand to hER β in the test and control cultures; and

(d) identifying as a hER β - interactive compound any compound that reduces the binding of said labelled ligand to hER β .

51. A method as defined in claim 50, wherein the ligand is 17- β estradiol.

52. A method as defined in claim 50, wherein the hER β - interactive compound is an agonist.

53. A method as defined in claim 50, wherein the hER β - interactive compound is an antagonist.

54. A method for identifying hER β - interactive compounds, which method comprises:

(a) contacting the cell comprising a DNA vector of claim 41 with a labelled ligand in the presence of test compounds to form test reactions, and in the absence of test compounds to form control reactions;

(b) incubating said test and control reactions under appropriate conditions to achieve equilibrium binding of the labelled ligand to hER β ;

(c) determining the level of binding of the labelled ligand to hER β in the test and control cultures; and

(d) identifying as a hER β - interactive compound any compound that reduces the binding of said labelled ligand to hER β .

55. A method as defined in claim 54, wherein the ligand is 17- β estradiol.

56. A method as defined in claim 54, wherein the hER β - interactive compound is an agonist.

57. A method as defined in claim 54, wherein the hER β - interactive compound is an antagonist.

58. A method for identifying hER β - interactive compounds, which method comprises:

(a) contacting the cell comprising a DNA vector of claim 49 with a labelled ligand in the presence of test compounds to form test reactions, and in the absence of test compounds to form control reactions, wherein the DNA vector encodes a functional hER β ;

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(b) incubating said test and control reactions under appropriate conditions to achieve equilibrium binding of the labelled ligand to hER β ;

(c) determining the level of binding of the labelled ligand to hER β in the test and control cultures; and

(d) identifying as a hER β - interactive compound any compound that reduces the binding of said labelled ligand to hER β .

59. A method as defined in claim 58, wherein the ligand is 17- β estradiol.

60. A method as defined in claim 58, wherein the hER β - interactive compound is an agonist.

61. A method as defined in claim 58, wherein the hER β - interactive compound is an antagonist.